



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,287	12/12/2001	Michael Black	RLT-111/US	1768

758 7590 02/07/2007  
FENWICK & WEST LLP  
SILICON VALLEY CENTER  
801 CALIFORNIA STREET  
MOUNTAIN VIEW, CA 94041

EXAMINER
----------

SHAY, DAVID M

ART UNIT	PAPER NUMBER
----------	--------------

3735

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/017,287

Applicant(s)

BLACK

Examiner

david shay

Art Unit

3735,

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on September 28, 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-12,19-23,25-29,31-34,41,43-48,53,55,56,69 and 71-85 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-12,19-23,25-29,31-34,41,43-48,53,55,56,69 and 71-85 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 28, 2006 has been entered.

With respect to the assertion that none of the combinations teach the scanning of the beam in a “three-dimensional scanning pattern within a volume”, the examiner respectfully notes that the removal of the pigments at different depths, as described in Tan, or the removal of various color pigments, wherein one is deposited on top of another, will necessarily led to a “three-dimensional scanning pattern within a volume” as claimed.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 46, and 85 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2 and 46, the exact meaning of “at least one of” is unclear, since there is only one element in the list. In claim 85, the exact meaning of the term “de-foci footprints” is unclear, this term is totally unfamiliar to the examiner and it's meaning cannot be determined; this claim is too indefinite to allow the application of art thereto.

Claims 1, 2, 6-12, 20, 21, 23, 25, 26, 31-34, 43, 45-48, 55, 69, 71-74, 76-80, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black et al ('740) in combination with Sugiyama et al and Tan et al. Black et al ('740) teach a device and method as claimed,

Art Unit: 3735

including selection of a treatment plan e.g. irradiating the tissue with a given wavelength on the basis of it's color, but does not discuss the source of the different laser wavelengths applied all at once. Sugiyama et al teach that multiple lasers can be used to produce simultaneous beams of differing frequencies. Tan et al teach that tattoos can have various color pigments and pigments distributed to different depths. It would have been obvious to the artisan of ordinary skill to employ the applicator of Black et al ('740) in the apparatus and method of Sugiyama et al, since this will direct all the laser wavelengths to the same spot, and enables the use of smaller spot sizes, as taught by Black et al ('740) or to employ the device and method of Sugiyama et al in the device and method of Black et al ('740) since Black et al ('740) give no structure to apply different beams all at once, to employ different pulse widths, since this is not critical; is well within the skill of one having ordinary skill in the art; provides no unexpected result; and will provide the required power variation to deposit the correct amount of energy at different depths, and to employ a semiconductor diode laser, since this is not critical; is a recognized equivalent to other lasers, is well within the skill of one having ordinary skill in the art; provides no unexpected result; and would consume less power than gas, crystal, or liquid lasers, and in either case to employ the method to remove amateur multi color tattoos, which requires different three dimensional delivery patterns, as taught by Tan et al, and which would necessarily produce different spot sizes at the surface, thus producing a device such as claimed.

Claims 1, 2, 6, 8-12, 25, 26, 28, 31-34, 43, 45-48, 55, 69, 71-74, 76-80, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumoulin – White et al in combination with Black et al ('740) and Tan et al. Dumoulin – White et al teach a device such as claimed except the use of a mirror device, the spot size, and scanning the beam. Black et al

Art Unit: 3735

(‘740) teach the use of a mirror based focusing device that produces the claimed spot size and selection of a treatment plan e.g. irradiating the tissue with a given wavelength on the basis of it’s color. Tan et al teach that tattoos can have various color pigments and pigments distributed to different depths. It would have been obvious to the artisan of ordinary skill to employ the device and method of Black et al (‘740) in the device and method of Dumoulin – White et al, since this would locate the various wavelength of laser light at the same point, or to provide the device and method of Dumoulin – White et al in the device and method of Black et al (‘740), since the device and method of Black et al (‘740) requires no particular laser, and in either case to employ the method to remove amateur multi color tattoos, which requires different three dimensional delivery patterns, as taught by Tan et al, and which would necessarily produce different spot sizes at the surface, and to employ different pulse widths, since this is not critical; is well within the skill of one having ordinary skill in the art; provides no unexpected result; and will provide the required power variation to deposit the correct amount of energy at different depths, thus producing a device such as claimed.

Claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg in combination with Black et al (‘740) and Tan et al. Freiberg teaches device on claimed except the mirror-based device, the spot size, and scanning. Black et al (‘740) teach the use of a mirror-based device as claimed which can be scanned and selection of a treatment plan e.g. irradiating the tissue with a given wavelength on the basis of it’s color. Tan et al teach that tattoos can have various color pigments and pigments distributed to different depths. It would have been obvious to the artisan of ordinary skill to employ the device and method of Black et al (‘740) in the device and method

Art Unit: 3735

of Freiberg, since this would effectively combine the different wavelengths and project them at the same spot, as taught by Black et al ('740) or to employ the sources and beam combiners of Freiberg in the device of Black et al ('740) since Black et al ('740) describes no structure for applying different color beams all at once, to employ different pulse widths, since this is not critical; is well within the skill of one having ordinary skill in the art; provides no unexpected result; and will provide the required power variation to deposit the correct amount of energy at different depths, and to employ a semiconductor diode laser, since this is not critical; is a recognized equivalent to other lasers, is well within the skill of one having ordinary skill in the art; provides no unexpected result; and would consume less power than gas, crystal, or liquid lasers, and in either case to employ the method to remove amateur multi color tattoos, which requires different three dimensional delivery patterns, as taught by Tan et al, and which would necessarily produce different spot sizes at the surface, thus producing a device such as claimed.

Claims 1, 28, 29, 31, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg in combination with Black et al ('740) and Tan et al as applied to claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 above, and further in view of Black et al ('936). Black et al ('936) teach the use of a micromanipulator as an input for an endoscope. It would have been obvious to the artisan of ordinary skill to employ the micromanipulator of Black et al ('936) in the device of Freiberg, since this is an appropriate control device for an endoscope, as taught by Black et al ('936) or to include the beam combiner of Freiberg in the device of Black et al ('936), since this allows multiple treatments with a single instrument as taught by Freiberg and to construct the device in the claimed dimensions, since this is not critical, thus producing a device and method such as claimed.

Art Unit: 3735

Claims 20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg a combination with Black et al ('740) and Tan et al as applied to claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 above, and further in view of Dew. Dew teaches removing optical components from the optical path by rendering the location that the optical component resides in no longer a part of the optical path. It would have been obvious to the artisan of ordinary skill to employ the optical path combining device of Dew in the device of Freiberg, since Freiberg discloses no particular mechanism to accomplish the superposition of beams prior to reaching any steering device, thus producing a device such as claimed.

Claims 27, 44, and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg as combination with Black et al ('740) and Tan et al as applied to claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 above, and further in view of Kittrell et al. Kittrell et al teach an apparatus for and method of the use of fluorescence maps for diagnosing tissue to locate tissue that is suitable for removal. It would have been obvious to the artisan of ordinary skill to employ the diagnostic system of Kittrell et al in the system of Freiberg since this can locate the tissue requiring treatment and prevent the treatment of healthy tissue as taught by Kittrell et al or to include the multiple laser system of Freiberg in the device of Kittrell et al, since this would allow treatment of both hard and soft tissue, as taught by Freiberg, thus producing a device such as claimed.

Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg a combination with Black et al ('740) and Tan et al as applied to claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 above, and further in view of Garcia.

Art Unit: 3735

Garcia teaches the use of treatment plan databases. It would have been obvious to the artisan of ordinary skill to employ the database of Garcia in the device of Freiberg, since this would vastly simplify the input of the treatment by the physician, since only the particular plan need be indicated, rather than entering multiple parameters for multiple lasers and conditions, thus producing a device such as claimed.

Claims 82 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freiberg in combination with Black et al ('740) and Tan et al as applied to claims 1, 2, 6-8, 10-12, 19, 25, 26, 31-34, 41, 43, 45-48, 53, 55, 69, 71-74, 76-80, and 83 above, and further in view of Black et al ('509). Black et al ('509) teaches the use of carbon dioxide and argon lasers. It would have been obvious to the artisan of ordinary skill to employ the lasers of Black et al ('509) in the device of Freiberg, since this would allow immediate coagulation after making an incision, as taught by Black et al ('509), thus producing a device such as claimed.

Applicant's arguments with respect to claims 82-85 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed September 28, 2006 have been fully considered but they are not persuasive. The arguments are not persuasive for the reasons set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Shay whose telephone number is (571) 272-4773. The examiner can normally be reached on Tuesday through Friday from 6:30 a.m. to 5:00 p.m.

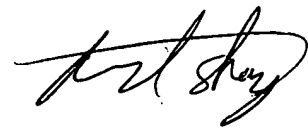
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II, can be reached on Monday, Tuesday, Wednesday, Thursday, and



Art Unit: 3735

Friday. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DAVID M. SHAY  
PRIMARY EXAMINER  
GROUP 330